

AMENDMENTS TO THE SPECIFICATION

At pages 24-25, please amend paragraph [0118] as follows:

[0001] Where the electrodes comprise a group IV element (e.g. silicon, germanium, etc.) the molecules are readily coupled to the surface if provided with either a thiol group or an alcohol or with a linker comprising a thiol group or an alcohol. Methods of coupling a molecule comprising an alcohol or a thiol to a group IV element are described in copending application USSN ~~\_\_\_\_\_~~  
20030081463 A1 entitled FORMATION OF SELF-ASSEMBLED MONOLAYERS ON SILICON SUBSTRATES, filed on October 26, 2001. Basically, the method involves halogenating the group IV element surface; providing a solution comprising the molecule to be coupled to the surface where the is alcohol terminated (e.g., terminated with an alcohol selected from the group consisting of a primary alcohol, a secondary alcohol, a tertiary alcohol, a benzyl alcohol, and an aryl alcohol) or thiol terminated (e.g., a primary thiol, a secondary thiol, a tertiary thiol, a benzyl thiol, an arylthiol, etc.) and present in a solvent and said alcohol-terminated organic molecule is in a solvent (e.g., mesitylene, durene, o-dichlorobenzene, 1,2,4-trichlorobenzene, 1-chloronaphthalene, 2-chloronaphthalene, N,N-dimethylformamide, N,N-dimethylacetamide, N,N-dimethylpropionamide, benzonitrile, anisole, etc.); and contacting the solution with the group IV element surface under conditions where the solvent is rapidly removed from the surface whereby the organic molecule is coupled to said surface through an E-O- or an E-S- bond where E is the group IV element (e.g. silicon, germanium, doped silicon, doped germanium, etc.). The reaction is preferably performed in the presence of a base (e.g. 2,4,6-collidine, 2,6-lutidine, 2,6-di-*tert*-butylpyridine, 4-dimethylaminopyridine, trimethylamine, triethylamine, tributylamine, *N,N*-diisopropylethylamine, 1,8-bis(dimethylamino)naphthalene, 1,5-diazabicyclo[4.3.0]non-5-ene, 1,8-diazabicyclo[5.4.0]undec-7-ene, Na<sub>2</sub>CO<sub>3</sub>, NH<sub>3</sub>, etc.). Typically the surface is heated to a temperature of at least about 70°C.